INSTALLATION INSTRUCTIONS FOR GAS MANIFOLD PRESSURE TEST KIT (21U27; 622686-01)
USED WITH LS25 / UHSC SEPARATED COMBUSTION UNIT HEATERS

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WARNING
Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a licensed professional installer (or equivalent), service agency or the gas supplier.

CAUTION
As with any mechanical equipment, contact with sharp sheet metal edges can result in personal injury. Take care while handling this equipment and wear gloves and protective clothing.

CAUTION
Electrostatic discharge can affect electronic components. Take precautions to neutralize electrostatic charge by touching your hand and tools to metal prior to handling the control.

Shipping & Packing List
Package 1 of 1 contains the following:
1 - Tubing assembly (tee with long and short tubing)
1 - Round tubing (22” length)
1 - White Rodgers adapter kit (36G only)
1 - Barbed fitting (36H only)

Application
Kit (21U27) provides tubing and fittings needed to measure total manifold pressure for LS25 / UHSC Separate Combustion Unit Heaters. To correctly measure total manifold pressure on these models, the pressure at the positive gas manifold and the negative burner box must be considered.

NOTE- Total manifold pressure is the sum of the positive “+” and negative “-” sides of the manifold pressure.

Gas Manifold Check

Gas Manifold Check - White Rodgers 36G Series Single-Stage Gas Valve

A manifold pressure post located on the gas valve provides access to the manifold pressure. See figure 1, figure 2, and the following steps.

1- Use the adapter kit Allen wrench to back out the 3/32” hex screw from the gas manifold pressure post one turn.

2- Connect one end of the adapter kit tubing to the manifold pressure port. Connect the other end of the adapter kit tubing to the 5/16” end of the adapter kit reducer.

3- Connect one end of the 22” round tubing to the ¼” side of the adapter kit reducer. Connect the other end of the 22” round tubing to the “+” positive side of the measuring device.

4- Carefully remove the factory-installed tubing from the gas valve vent barb. Connect the factory-installed tubing to the open end of the tubing assembly tee.

5- Connect the tubing assembly short tubing leg to the gas valve vent barb. Connect the long tubing leg to negative “-” side of measuring device.

6- Start heat and let run for 5 minutes to allow for steady state conditions.

7- After allowing unit to stabilize for 5 minutes, record total manifold pressure. Compare manifold pressure to unit rating plate or installation instruction high altitude tables as applicable.

8- If necessary, make adjustments. Figure 1 shows adjustment screw location. Access adjustment screw(s) by removing brass cap screw. Reinstall brass cap screw(s) after adjustments are completed.

9- When accurate reading(s) and adjustment(s) are made, shut unit off and remove measuring device.

10- Close the gas manifold pressure port 3/32” hex screw securely.

11- Reconnect the factory tubing to the gas valve vent barb.

12- Start unit and perform leak check. Seal leaks if found.

FIGURE 1
WHITE RODGERS 36G GAS VALVE
Single-Stage

MANIFOLD PRESSURE ADJUSTMENT SCREW
INLET PRESSURE PORT
MANIFOLD PRESSURE OUTLET
GAS VALVE SWITCH SHOWN IN OFF POSITION
**Gas Manifold Check - White Rodgers 36H Series**

**Two-Stage Gas Valve**

A ¼” NPT tapped plug located on the gas valve provides access to the manifold pressure outlet. See figure 3, figure 4, and the following steps.

1- Remove and retain the gas manifold pressure outlet ¼” NPT plug.

2- Install the threaded end of the barbed fitting into the ¼” NPT manifold pressure outlet.

3- Connect one end of the 22” round tubing to the barbed fitting. Connect the other end of the 22” round tubing to the “+” positive side of the measuring device.

4- Carefully remove the factory-installed tubing from the gas valve vent barb. Connect the factory-installed tubing to the open end of the tubing assembly tee.

5- Connect the tubing assembly short tubing leg to the gas valve vent barb. Connect the long tubing leg to negative “-” side of measuring device.
6- Start unit on high heat and let run for 5 minutes to allow for steady state conditions.

7- After allowing unit to stabilize for 5 minutes, record total manifold pressure. Compare manifold pressure to unit rating plate or installation instruction high altitude tables as applicable.

8- If necessary, make adjustments. Figure 3 shows adjustment screw locations. Access adjustment screw(s) by removing brass cap screw. Reinstall brass cap screw(s) after adjustments are completed.

9- Repeat steps 6, 7, and 8 on lower input.

10- When accurate reading(s) and adjustment(s) are made, shut unit off and remove measuring device.

11- Reinstall the ⅛” NPT plug retained in step 1.

12- Reconnect the factory tubing to the gas valve vent barb.

13- Start unit and perform leak check. Seal leaks if found.